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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,803	06/13/2002	Keith R. Olesen	UC18024	8627

109 7590 10/20/2003

THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER

PEZZUTO, HELEN LEE

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 10/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,803

Applicant(s)

OLESEN ET AL.

Examiner

Helen L. Pezzuto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claims 1-16 are pending in this application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Huth et al. (US-936).

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U.S. 5,102,936 to Huth et al. discloses a process of producing copolymers derived from ethylenically unsaturated monomers wherein a surface-active urethane macromonomer is present. Prior art monomer mixture contains 25-85 wt% of ethylenically unsaturated hydrophobic monomers (i.e. alkyl(meth)acrylates, styrene), 1-50 wt% of ethylenically unsaturated monomers capable of salt formation (i.e. (meth)acrylic acid, maleic acid, vinylsulfonic acids, 0.1-30 wt% of ethylenically unsaturated urethane derivatives of formula (I), 0-10 wt% of other unsaturated monomers including hydroxyalkyl (meth)acrylate, 0-5 wt% of ethylenically unsaturated carbonyl compounds including those expressed in claims 3 and 16, and up to 5 wt% of ethylenically polyunsaturated crosslinking monomers (col. 3, line 10 to col. 5, line 2). Prior art further disclose and exemplify neutralization of the resulting copolymer so as to form a thickener composition. Prior art copolymer has molecular weight above 10,000 g/mol. Accordingly, the instant invention as defined by claims 1-6 is anticipated by prior art disclosure.

3. Claims 1-2, 4-5, and 7-8 are rejected under 35

U.S.C. 102(b) as being anticipated by Simpson et al. (US-036).

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U.S. 5,349,036 to Simpson et al. discloses an amphipathic copolymer having a weight average molecular weight of 2,500 to 20,000, comprising up to 30 wt% of at least one alkoxy polyethylene glycol (meth)acrylate which has a molecular weight of at least 2,000 which reads on the instant macromonomer, up to 30 wt% of non-functional monomers such as alkyl (meth)acrylate, and functional monomers containing hydroxyl and carboxyl units wherein at least some of the carboxy groups are neutralized. These functional include (meth)acrylic acid, maleic acid, and glycidyl methacrylate and alkyhydroxy (meth)acrylates, which embrace the instant monomer having latent crosslinking functionality (col. 3, line 32 to col. 5, line 32; working Examples). Thus, anticipating the present claims.

4. Claims 9-16 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 99/18157.

WO-157 discloses a latex composition prepared by a two-stage polymerization of a first stage polymer and a second stage polymer. Prior art first stage polymer is an emulsion polymerization of a mixture of monomers comprising at least 2 wt% of a carboxylic acid or anhydride functional monomer as presently claimed. Prior art first stage polymer has a number average molecular weight of 500-100,000 (pages 5-7).

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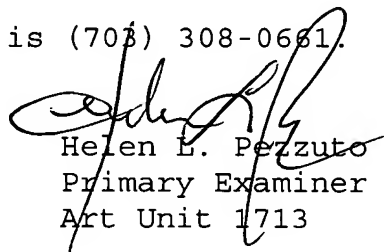
Prior art further teaches neutralization at the end of the first-stage polymerization resulting a swell, partially dissolve, or substantially dissolved polymer, thus, meeting the instant claims.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (703) 308-2393. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp